

FIG. 1A

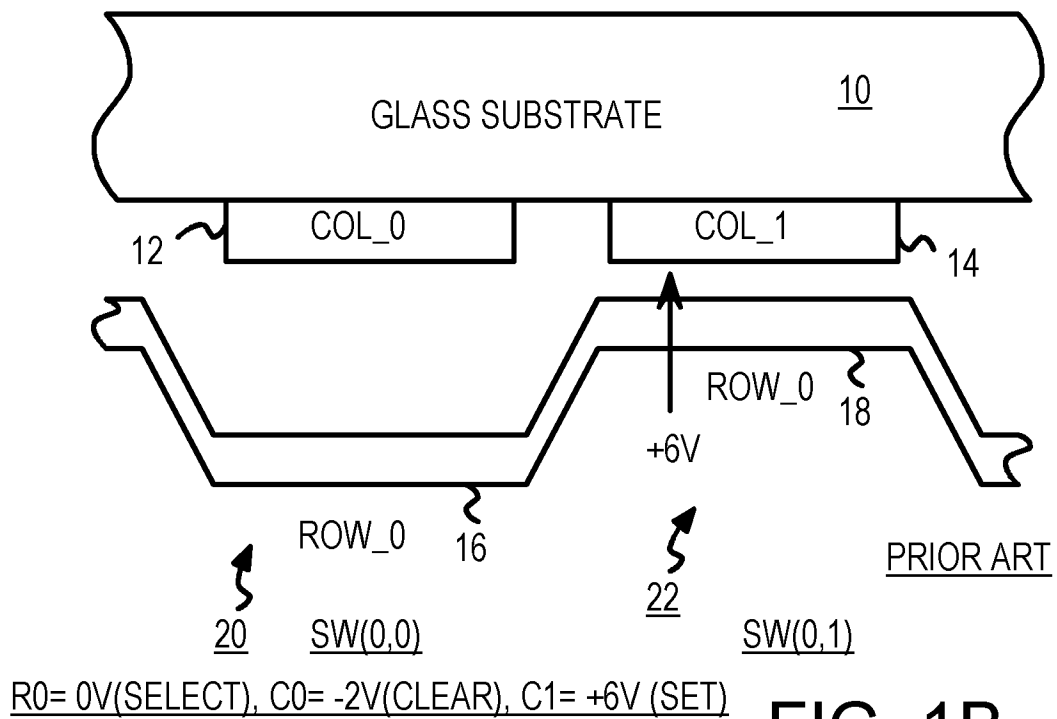
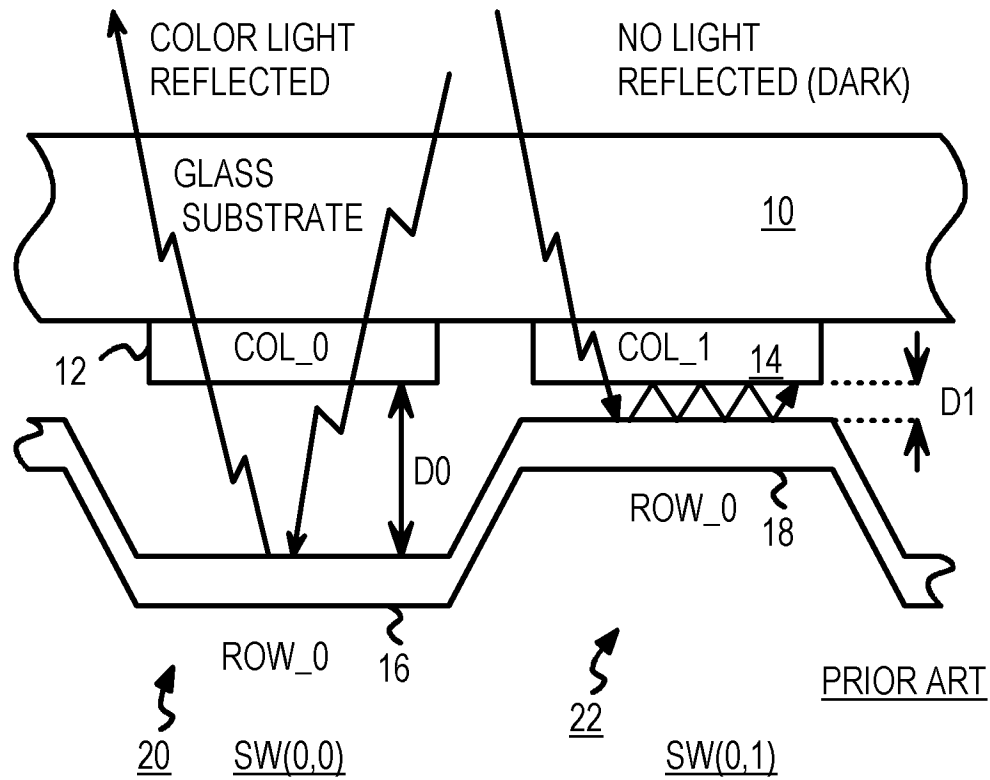
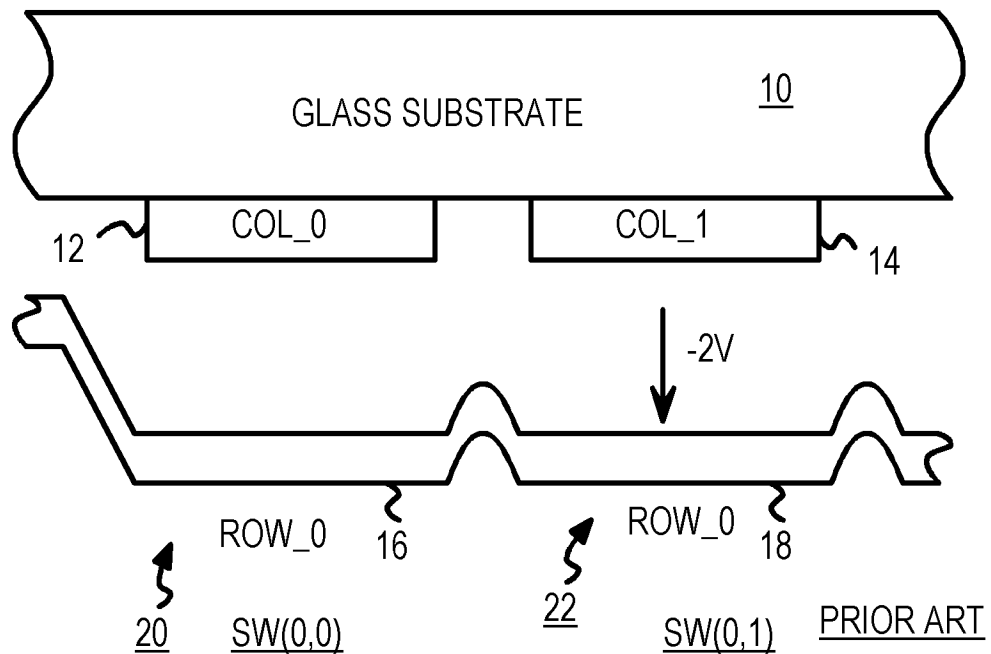


FIG. 1B



R0= +2V(DESELECT), C0= -2V(HOLD), C1= +6V (HOLD) **FIG. 1C**



R0= 0V(SELECT), C0= -2V(CLEAR), C1= -2V (CLEAR)

**FIG. 1D**

| COL<br>VOLTAGE<br>( VC) | ROW<br>VOLTAGE<br>( VR) | VOLTAGE<br>DIFFERENCE<br>(VC-VR) | MEMS CELL ACTION           |
|-------------------------|-------------------------|----------------------------------|----------------------------|
| +6                      | 0                       | +6                               | SET ON (TOGETHER, DARK)    |
| -2                      | 0                       | -2                               | CLEAR OFF (SEPARATED, LIT) |
| +6                      | +2                      | +4                               | HOLD LAST STATE            |
| -2                      | +2                      | -4                               | HOLD LAST STATE            |

FIG. 2

PRIOR ART

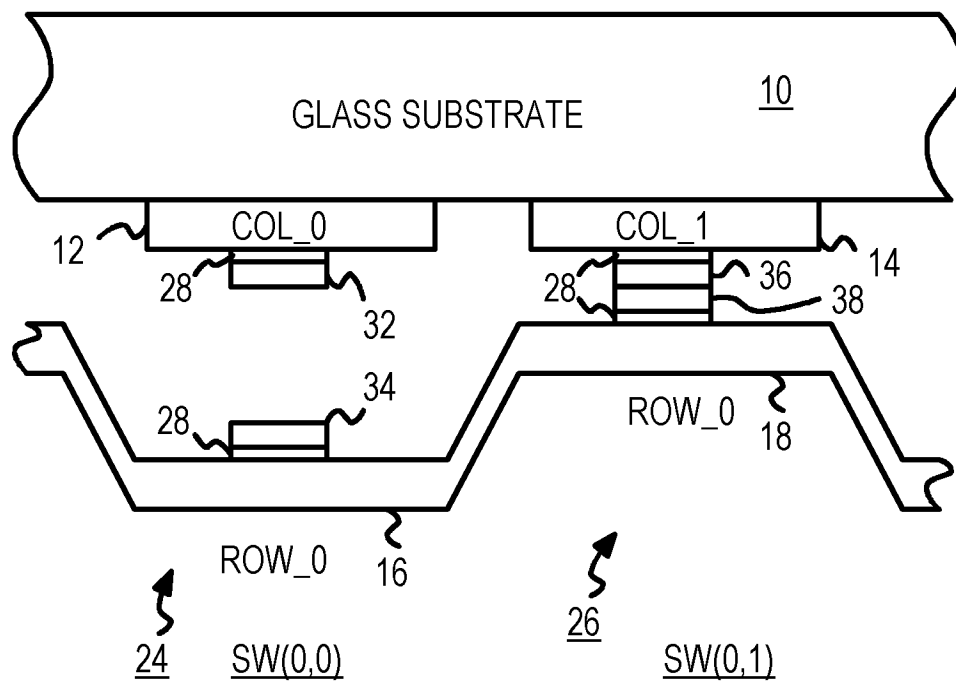


FIG. 3A

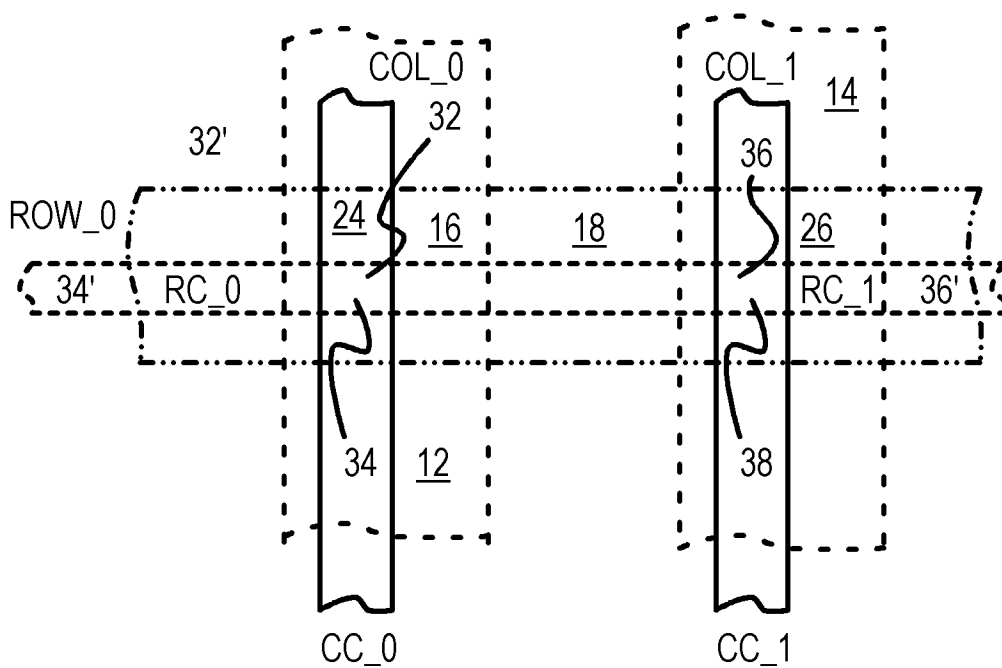


FIG. 3B

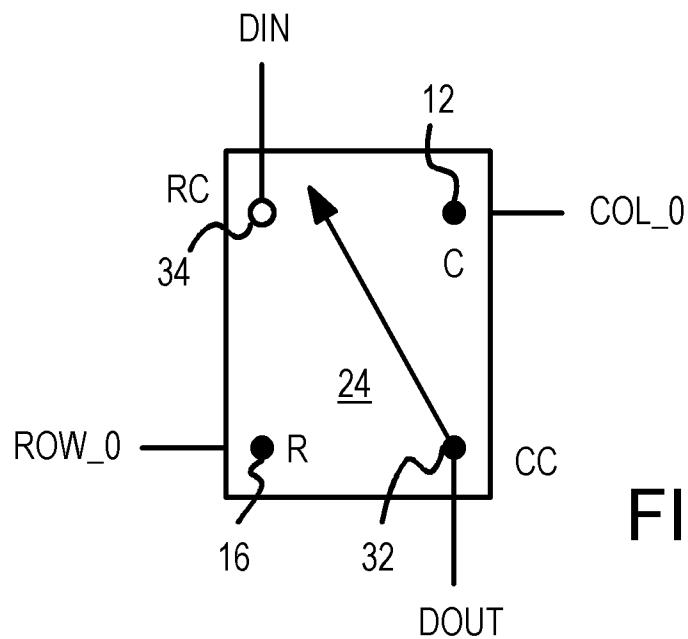


FIG. 3C

| COL<br>VOLTAGE<br>(VC) | ROW<br>VOLTAGE<br>(VR) | VOLTAGE<br>DIFFERENCE<br>(VC-VR) | MEMS SWITCH<br>ACTION | DOUT=DIN?      |
|------------------------|------------------------|----------------------------------|-----------------------|----------------|
| +6                     | 0                      | +6                               | SET ON (TOGETHER)     | DOUT=DIN       |
| -2                     | 0                      | -2                               | CLEAR OFF (SEPARATED) | ISOLATED       |
| +6                     | +2                     | +4                               | HOLD LAST STATE       | DOUT=DIN<br>OR |
| -2                     | +2                     | -4                               | HOLD LAST STATE       | ISOLATED       |

FIG. 3D

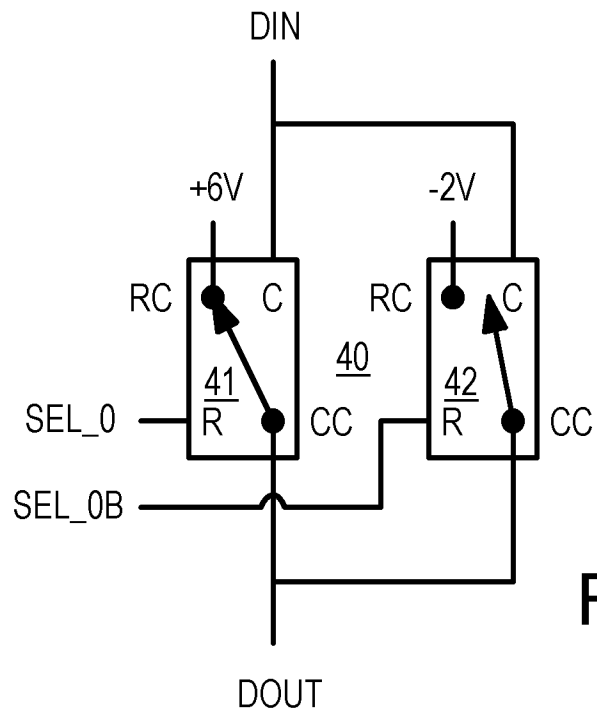


FIG. 4A

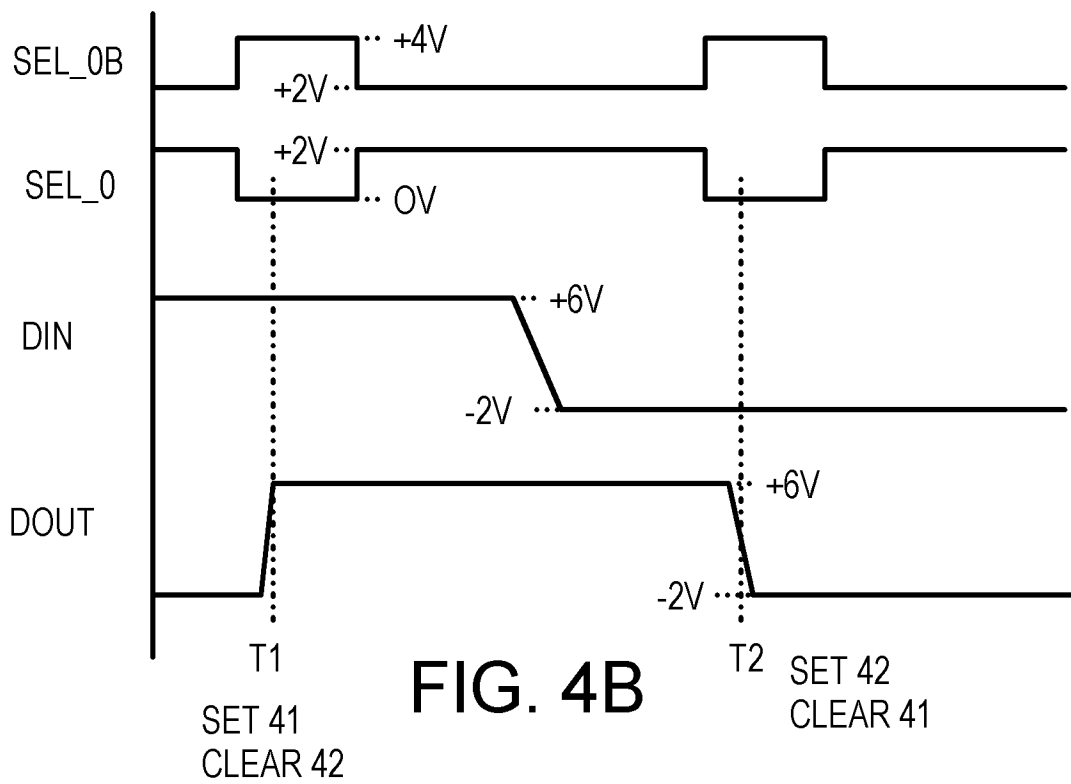


FIG. 4B

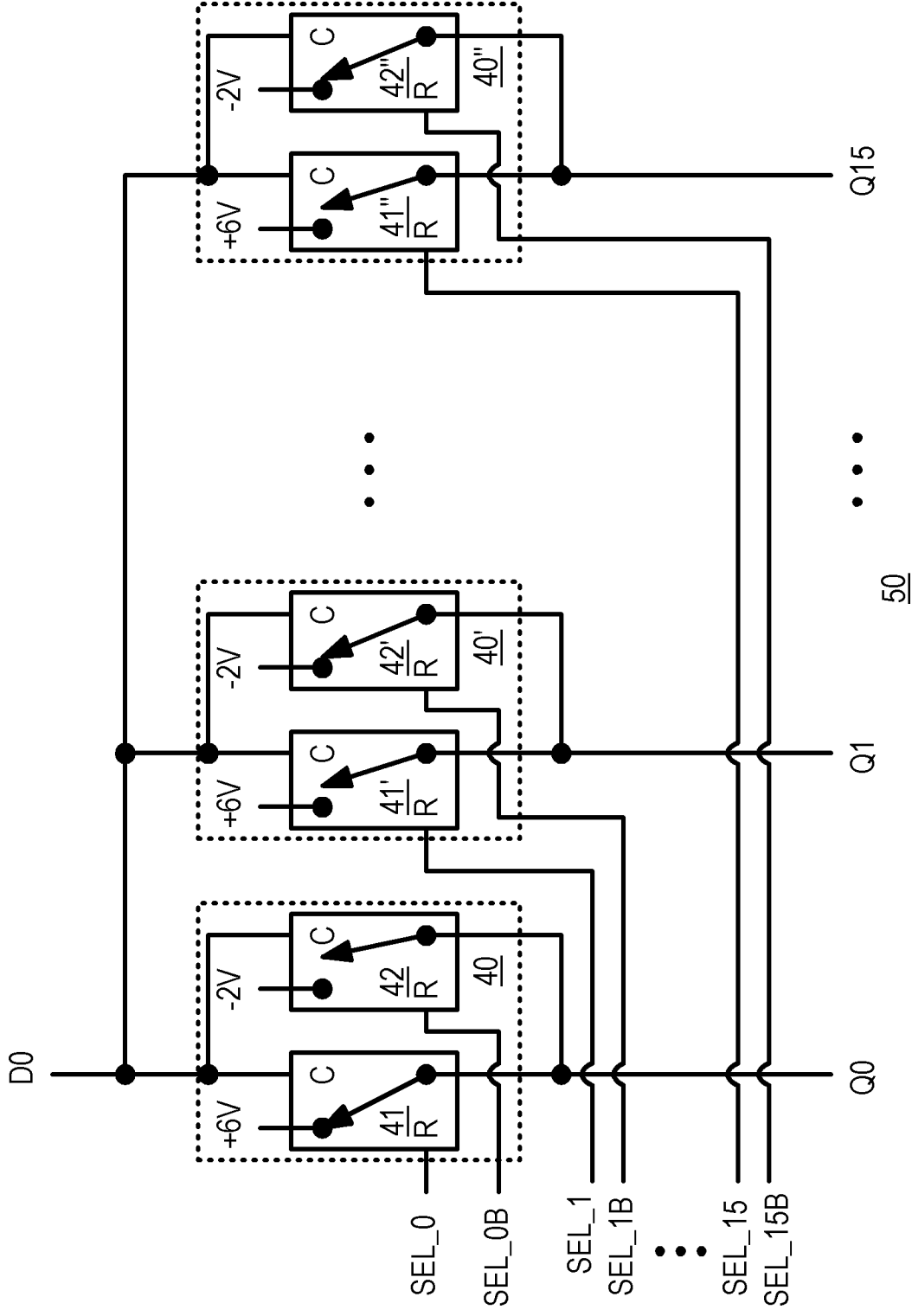
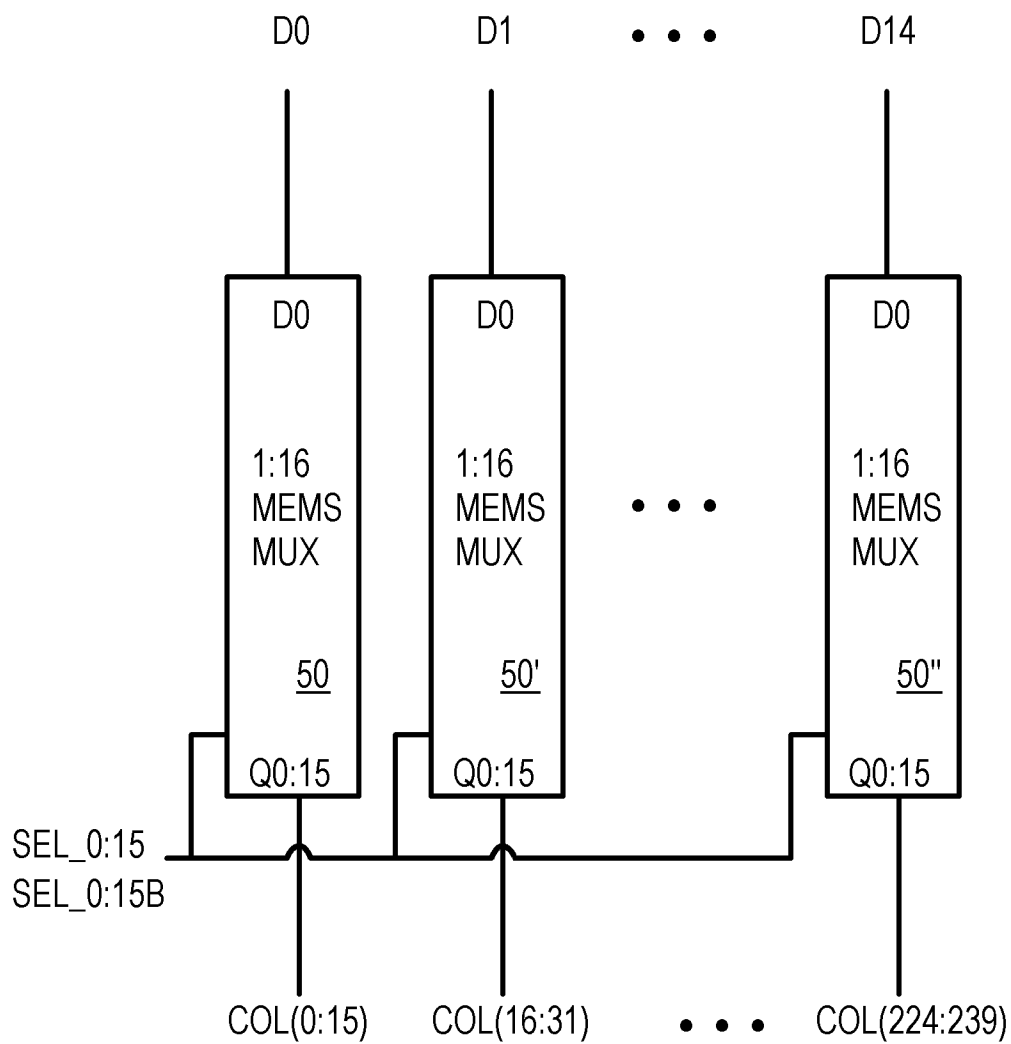


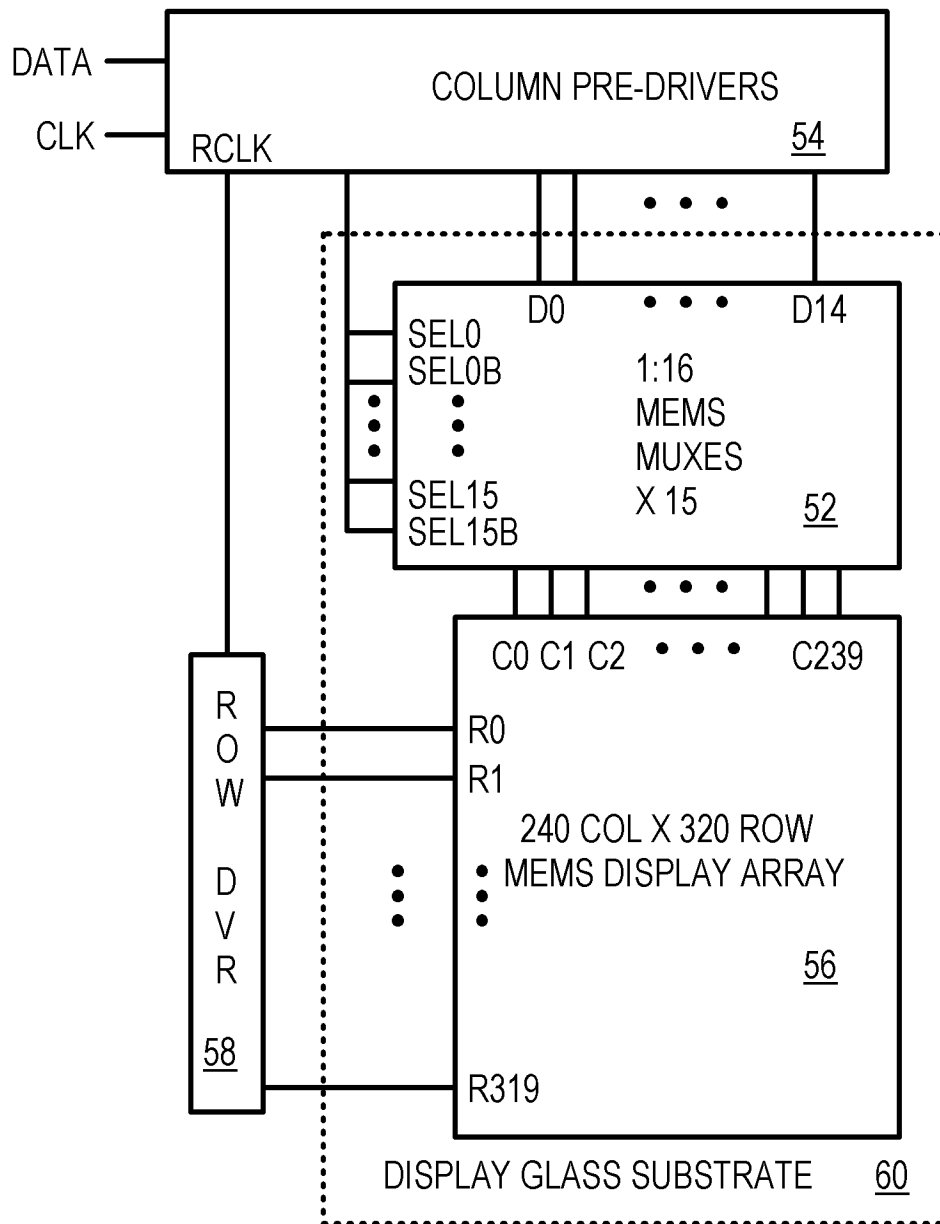
FIG. 5



52

FIG. 6





**FIG. 7**

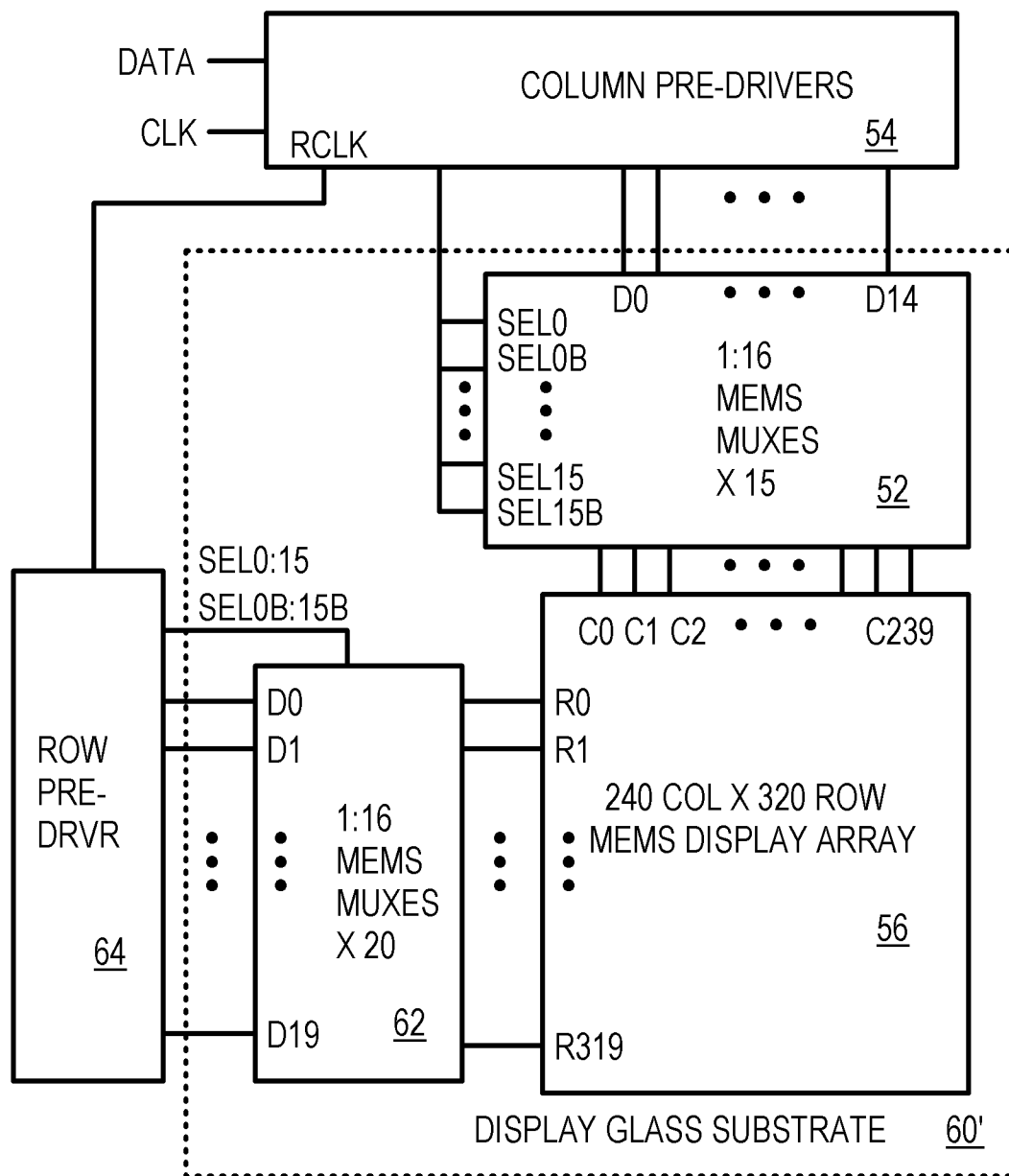
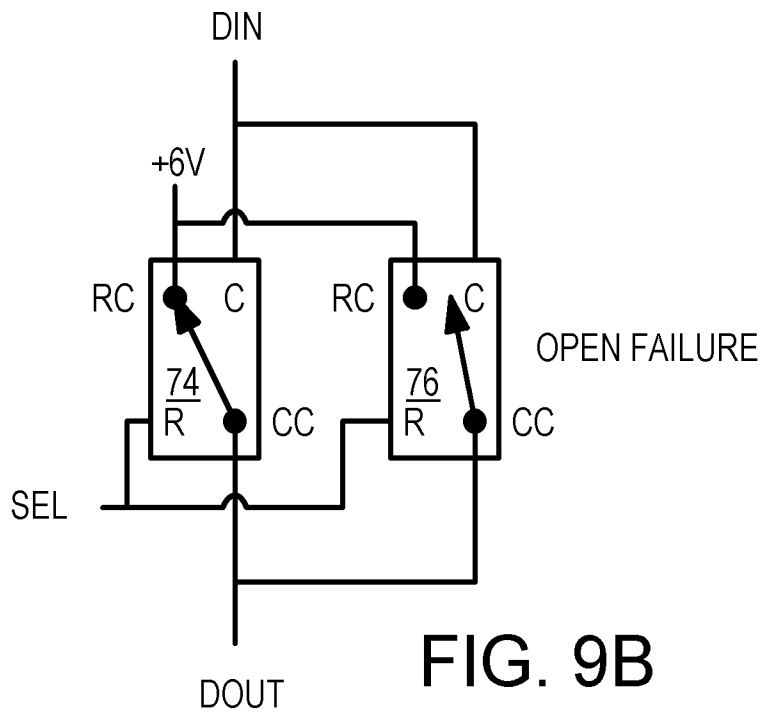
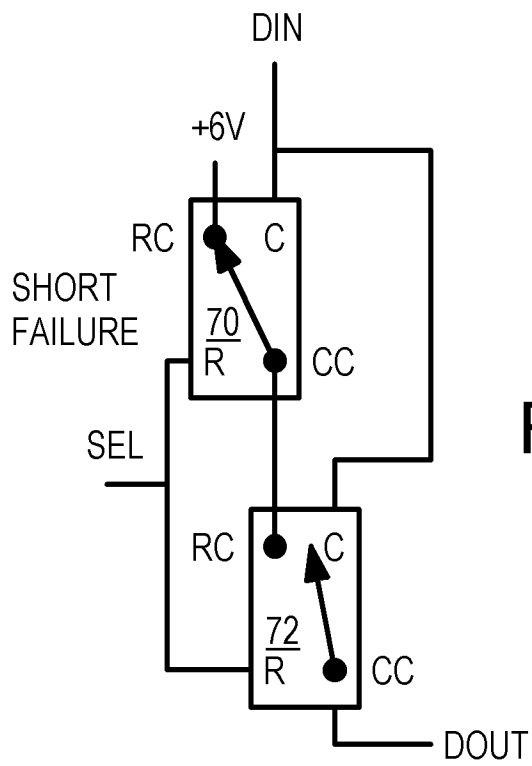


FIG. 8



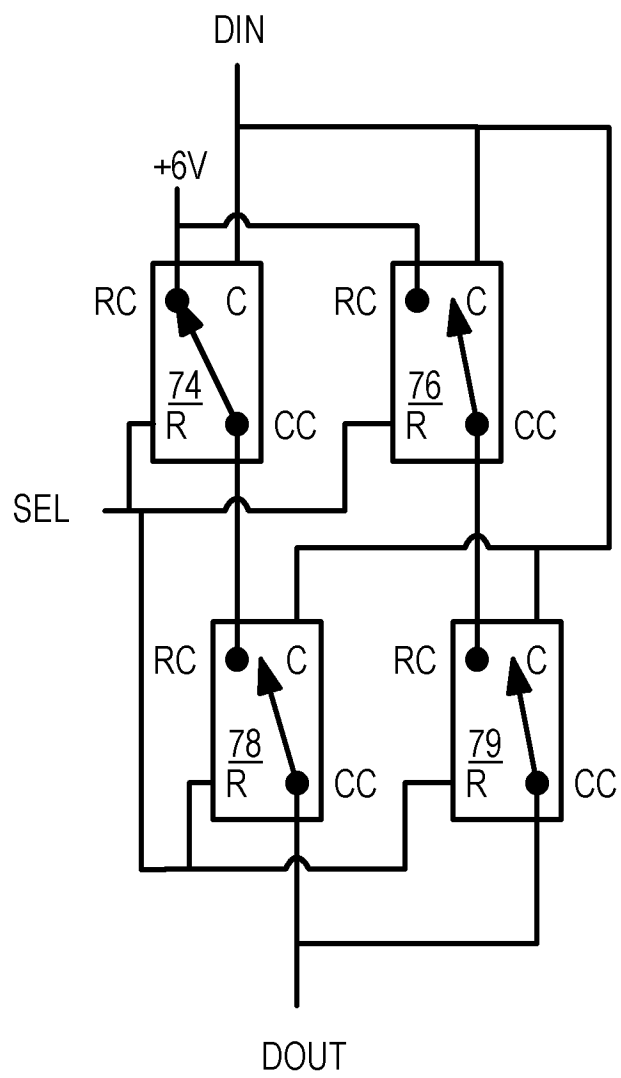


FIG. 9C

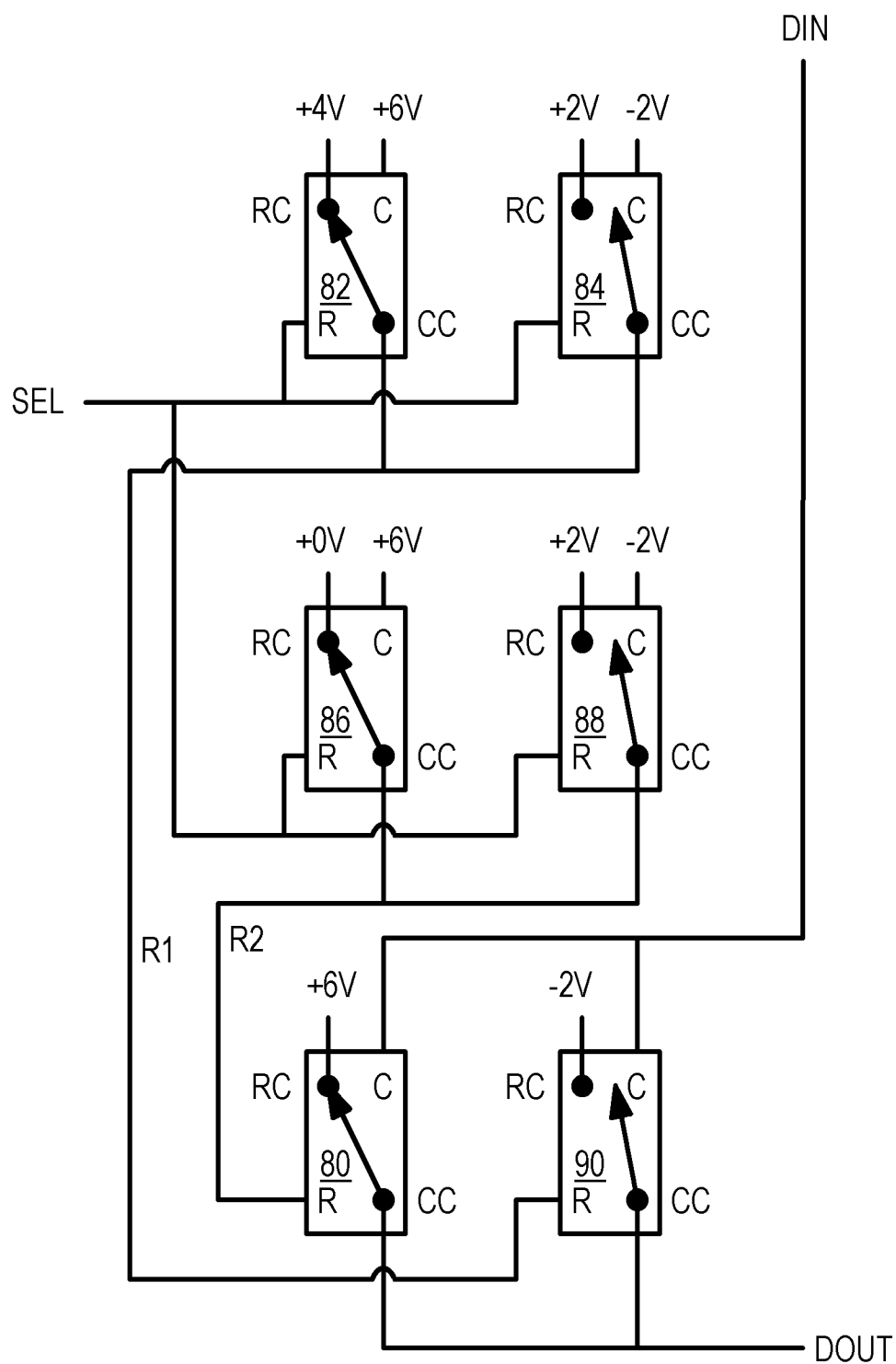


FIG. 10

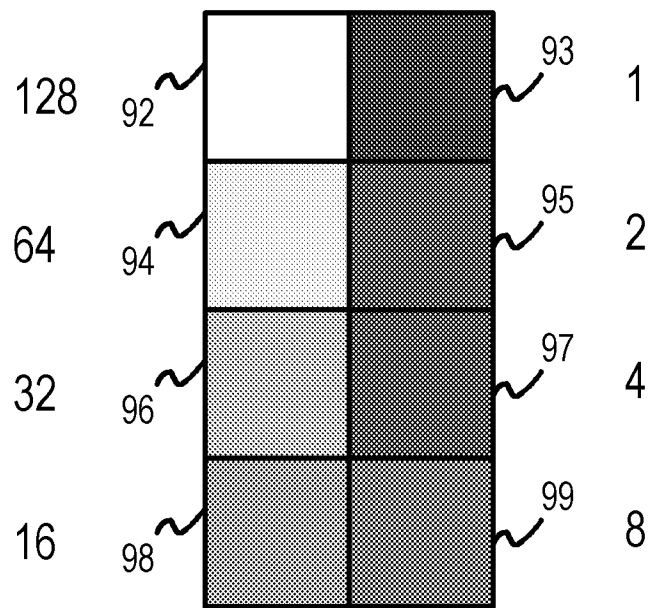


FIG. 11